SONY

3-753-216-21(1)

CD Radio Cassette-Corder

CFD-755/765

Operating Instructions

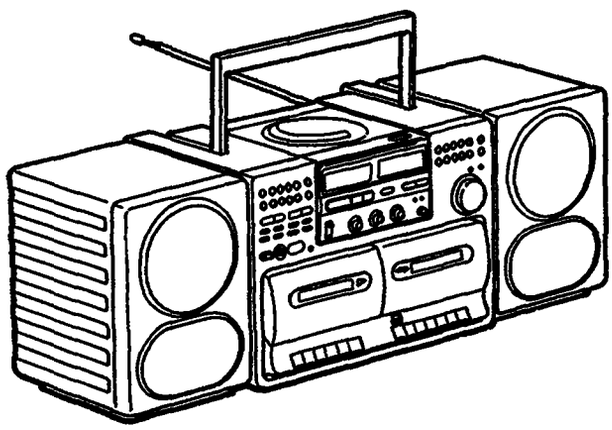
Before operating the unit, please read this manual thoroughly and retain it for future reference.

Owner's Record

The model and serial numbers are located on the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CFD-755/765 Serial No. _____

COMPACT disc DIGITAL AUDIO



MEGA BASS

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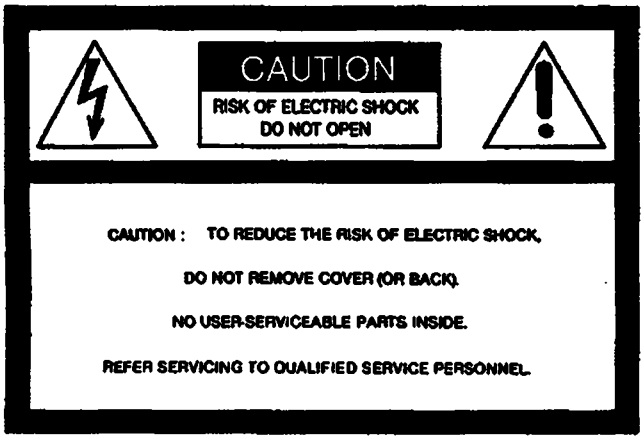
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

The use of optical instruments with this product will increase eye hazard.

Information

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turing the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna
Relocate the equipment with respect to the receiver
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

About This Manual

This manual includes information on two CD radio cassette-corders, the CFD-755 and CFD-765 *. First, refer to the model name indicated on the top and bottom panels and check what your model is. Any differences in appearance or operation of the two models are clearly indicated in the text, for example, "For CFD-765 only." However, note that the illustrations used in this manual are those of the CFD-765.

* CFD-765 is available only in the U.S.A.

Features

8-times over-sampling and digital filter
Signal process frequency of 8 times the reference frequency means playback with less distortion.

Dual D/A conversion system
High-fidelity playback with less phase shift is accomplished by the dual converter which works for the left and right channels independently.

Back-lighted display
Clear display makes it easy to distinguish the displayed indications at a glance in a dark place or at night.

Memory preset tuning
A total of 20 stations can be stored in any order.

High quality sound
- The Sony MEGA BASS system produces a powerful bass.
- By pressing the SPACE SOUND button, depth and spaciousness can be added to the original sound.

A high performance, high fidelity CD player with many functions
- An 8 cm (3-inch) CD can be played without using an adaptor.
- Repeat function allows playing either the entire disc or a single selection.
- Program play for playing selections in the order desired.
- Shuffle play for playing selections repeatedly in random order.
- A synchronized CD starting system for recording.
- An automatic editing function—The CD player automatically edits the selections on a CD depending on the tape length.

Digital clock timer
- You can listen to CD, radio or a taped program (for CFD-765 only) at a preset time.
- You can record CD or radio programs at a preset time. (for CFD-765 only)

Others
- High or normal speed tape dubbing
- CFD-765 is supplied with a remote commander.

Precautions

On safety
- Operate the unit only on 120V AC or 15V DC.
  For AC operation, use the AC power cord supplied; do not use any other type.
  For battery operation, use ten size D (R20) batteries.
- Unplug the unit from the wall outlet when it is not to be used for an extended period of time.
- When the internal batteries are not to be used, remove them to avoid damage caused by battery leakage and corrosion.
- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the unit, unplug the unit, and have it checked by qualified personnel before operating it any further.

On installation
- Do not leave the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- If the unit is left in a car parked in the sun, be sure to choose a location in the car where the unit will not be subject to the direct rays of the sun.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or springwound watches away from the unit to prevent possible damage from the magnet.

On operation
- If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the disc and wait about an hour for the moisture to evaporate.
- If the unit has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a cassette.
- The use of cassettes longer than 90 minutes is not recommended except for long continuous recording or playback.

Whether you are going to operate the unit on AC power or on batteries, make sure to insert three size AA (R6) batteries for the clock/timer/memory functions.

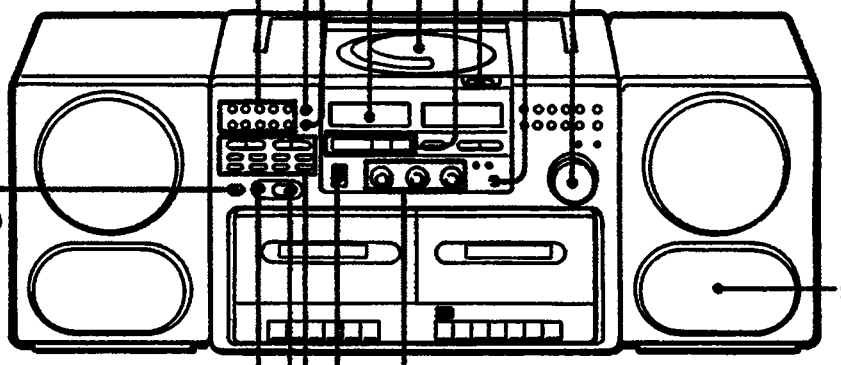
- **If a cassette cannot be removed**
  If the power was accidentally cut off (for example, the AC power cord was disconnected, the batteries fell out or an interruption of the main power source occurred) after ▶, REC or HI-SPEED DUB was pressed, it may not be possible to eject the cassette. In this case, supply power to the unit again and then press ■ ⏏ to remove the cassette.
- **If the cassette holder cannot be closed firmly**
  Press ■ ⏏ to remove the cassette and reinsert it into the holder. Do not attempt to play back or record when the cassette holder is not firmly closed. Otherwise, the cassette may be damaged.

If you have any question or problem concerning your unit, please consult the nearest Sony dealer.

Parts Identification

Refer to the pages indicated in ● for details.

CD Player Section • Clock/Timer Section



Disc holder

CD operation buttons ●
▷ (play)
▯▯ (pause)
□ (stop)

CD/TIMER/CLOCK MULTI OPERATION DISPLAY window ●

+10 (second digit)/AM/PM button ● ●

OPEN button ●

DISPLAY button ●

SPACE SOUND button (ON/OFF) ●

Number buttons for direct selection/clock/timer ● ● ●

VOLUME control

POWER switch (ON/OFF(TIMER/SLEEP))

Speaker (full-range)

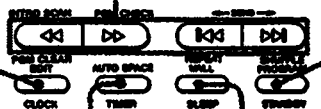
PHONES (headphones) jack (stereo minijack)
When the headphones are connected to the jack, the sound from the speakers does not come out.

ROTARY EQUALIZER controls ●

FUNCTION selector
CD: For listening to or recording the CD sound
TUNER: For listening to or recording radio programs.
DUBBING: For dubbing
TAPE: For playing back the tape

Remote sensor (for CFD-765 only)

◀◀ (manual search)/INTRO SCAN button ●
▶▶ (manual search)/PGM (program) CHECK button ●
|◀◀/▶▶| (selection search)/SEND buttons ●



PGM (program) CLEAR/EDIT button ●

SHUFFLE/PROGRAM button ● ●

CLOCK button ●

STANDBY button ●

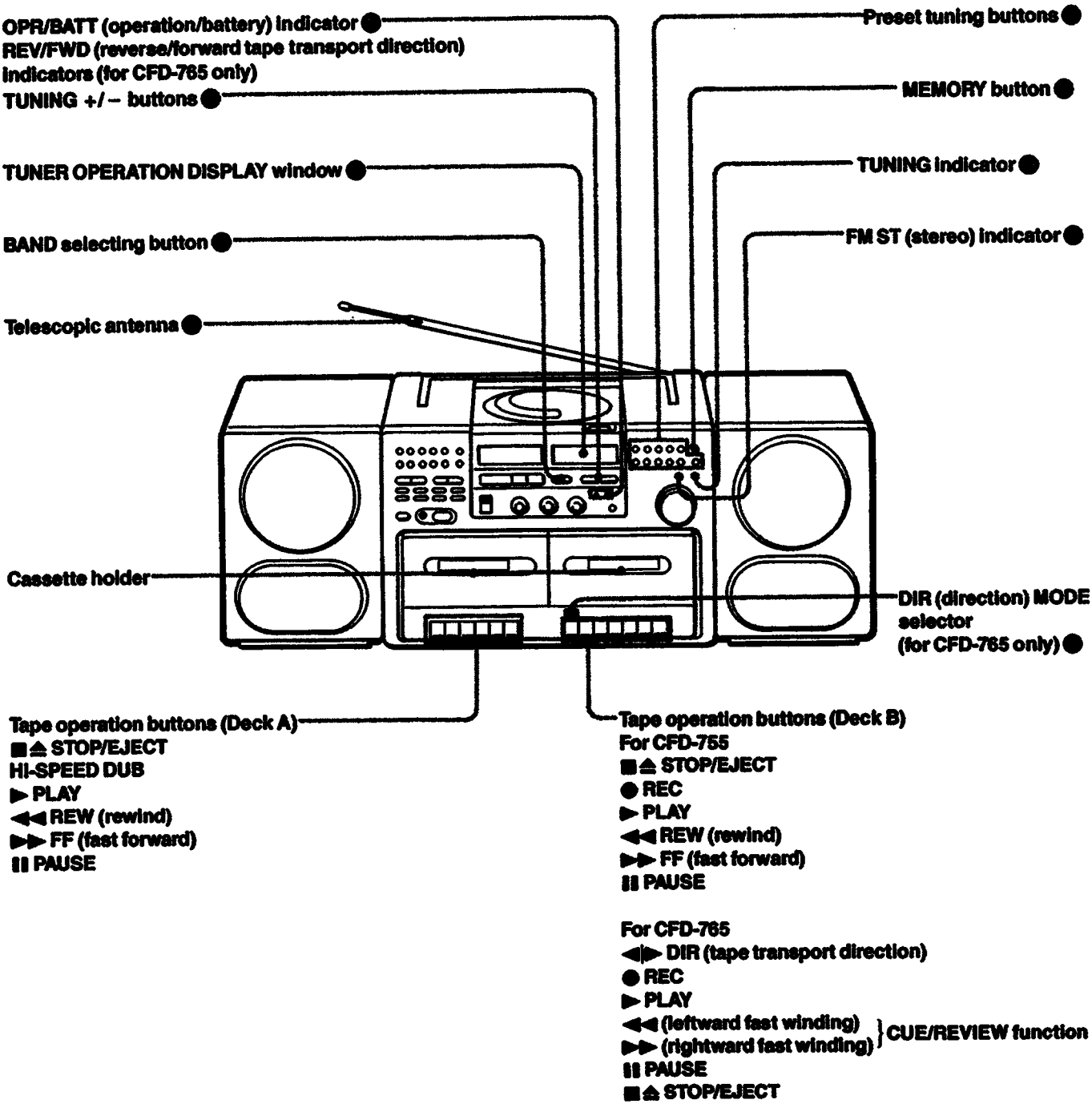
AUTO SPACE button ●

REPEAT 1/ALL button ●

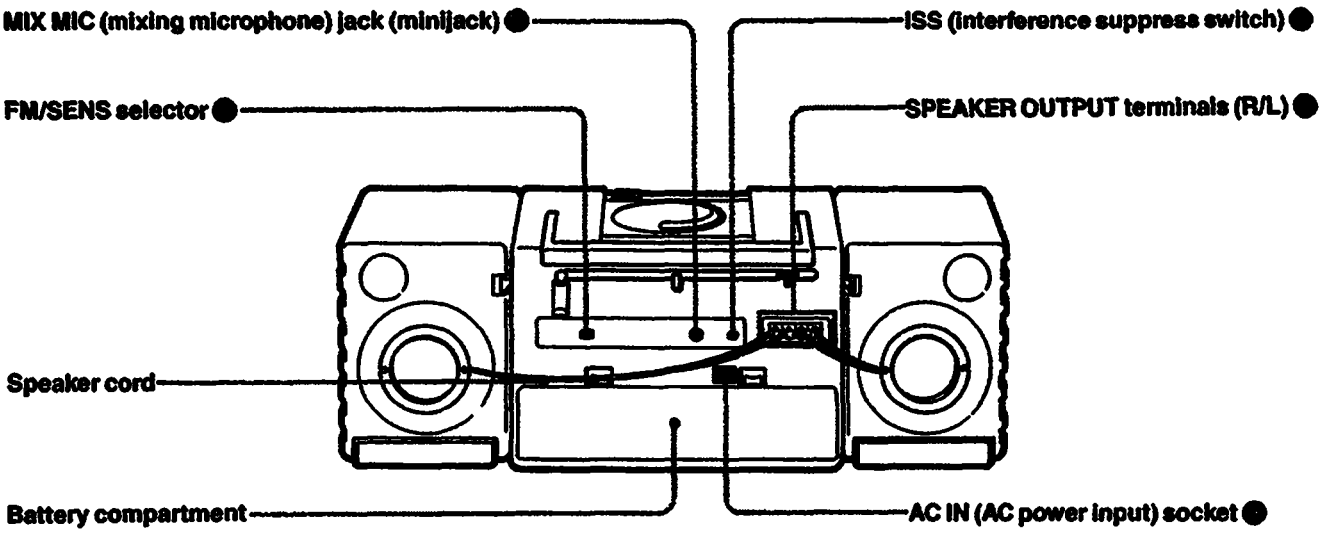
TIMER button ●

SLEEP button ●

Radio Cassette-Corder Section

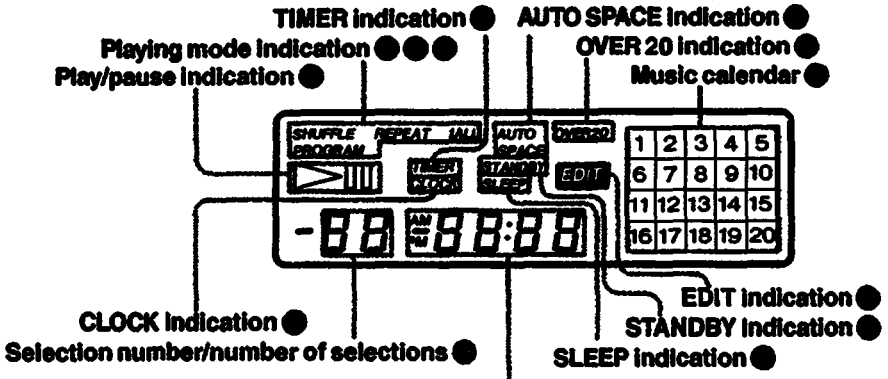


Rear Panel



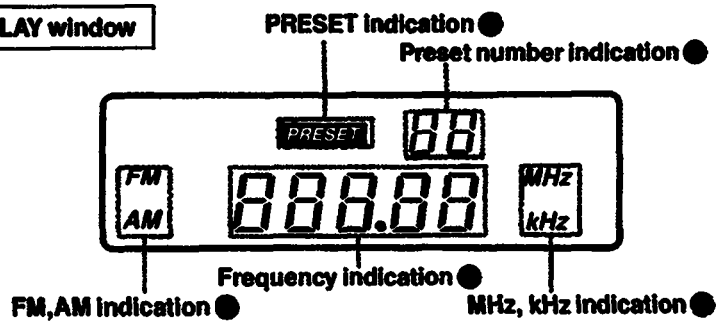
Display Section

CD/TIMER/CLOCK MULTI OPERATION DISPLAY window



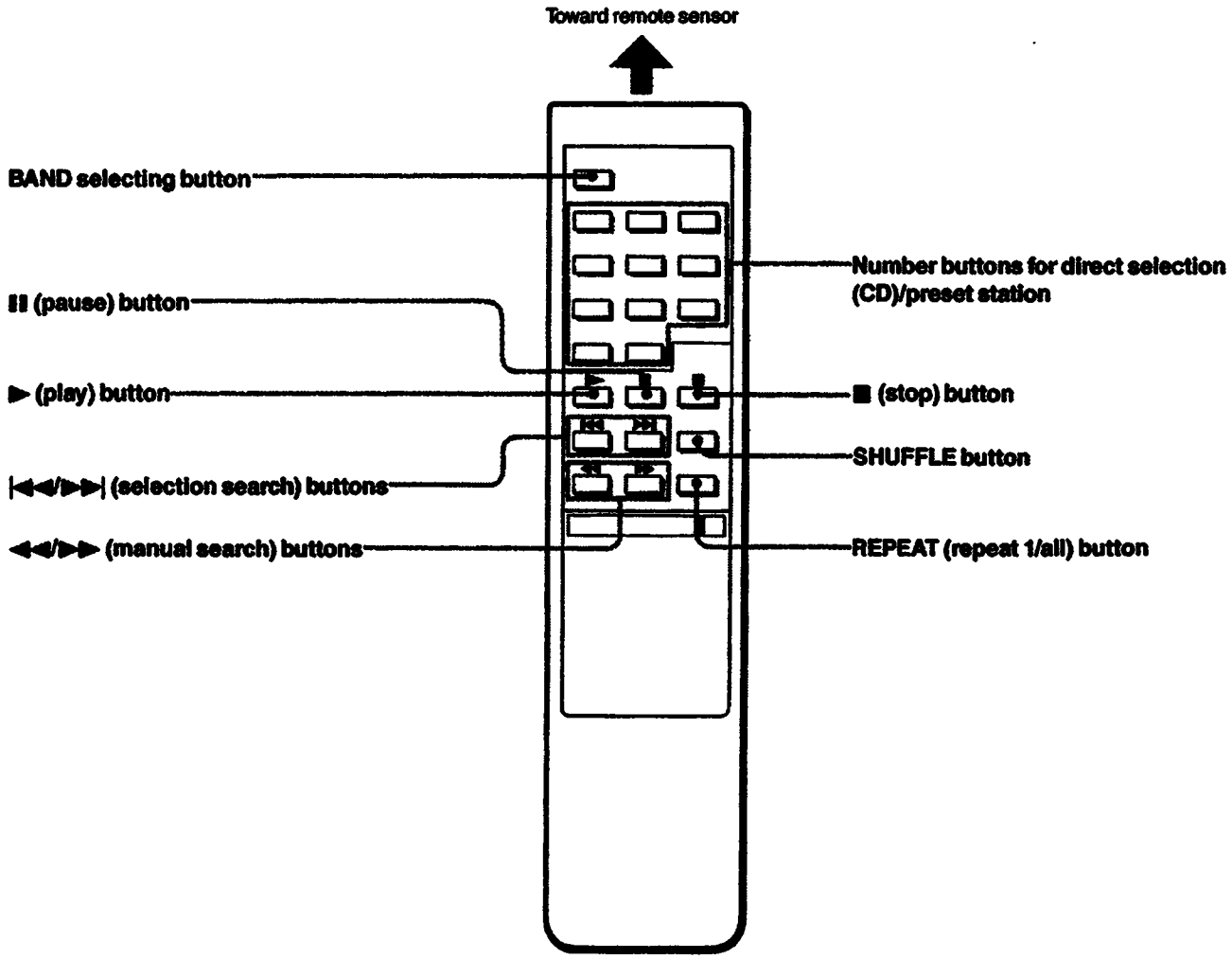
Clock display	During CD playing
	Playing time/remaining time
AM,PM indication Current time (hour, minute)	SEC (second) STEP/MIN (playing order/ minute)

TUNER OPERATION DISPLAY window



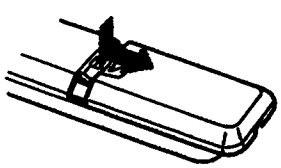
Remote commander RMT-C760 (for CFD-765 only)

This remote commander works for the CD and TUNER sections.

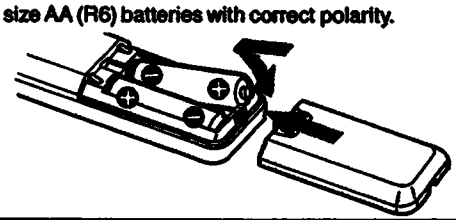


Battery installation

1



2 Two size AA (R6) batteries with correct polarity.



Notes on the remote commander

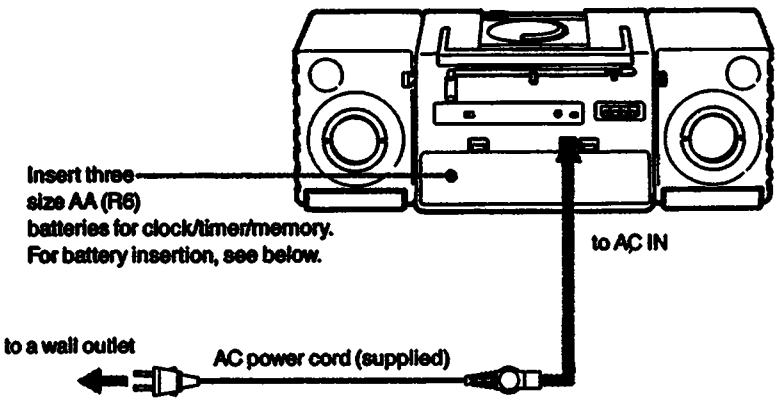
- Keep the commander away from extremely hot or humid places.
- To avoid malfunction, do not simultaneously depress two or more buttons.
- When the battery is exhausted, the commander will not operate the CFD-765. In this case, replace the batteries with new ones. In normal operation, battery life is up to half a year.

Power Sources

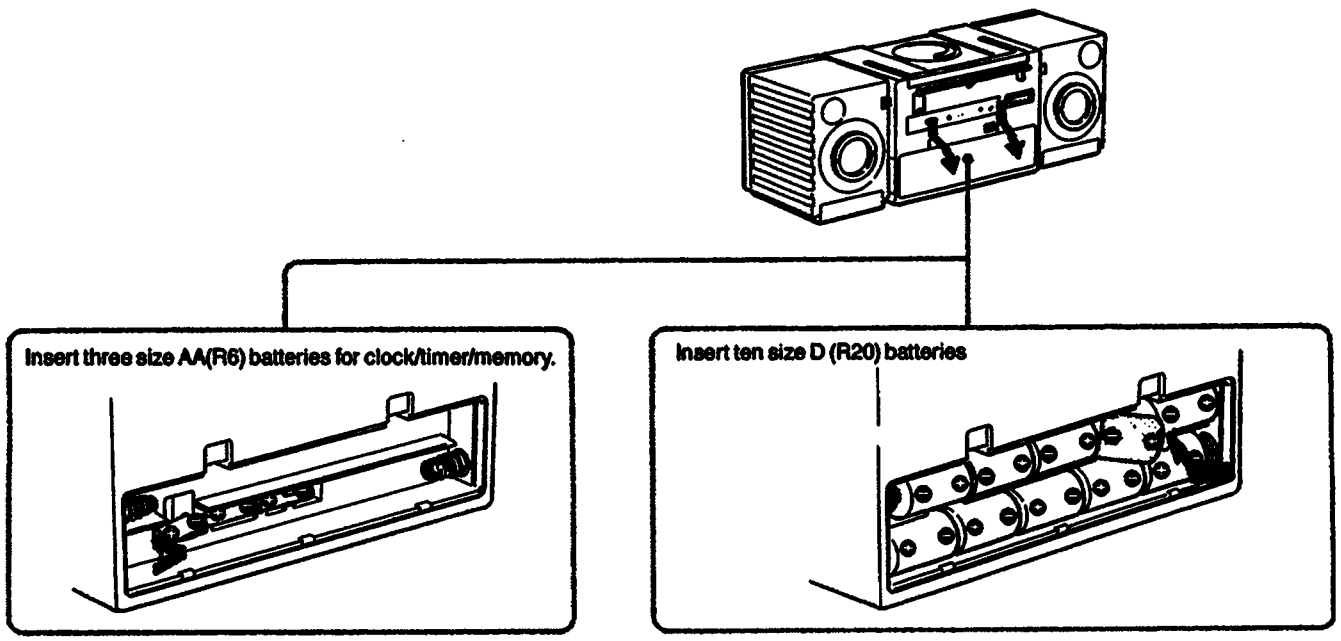
Two separate power sources are needed to operate this unit: one for the unit itself and one for the clock/timer/memory.

You can use the unit either with house current, or batteries. In either case, **be sure to insert batteries for the clock/timer/memory.**

House current


Insert three size AA (R6) batteries for clock/timer/memory. For battery insertion, see below.
to AC IN
to a wall outlet
AC power cord (supplied)

Batteries



Notes

- The unit cannot be operated on the internal batteries when the AC power cord is connected to the unit.
- For critical recordings or disc playing, operating the unit on house current is recommended.

Battery replacement

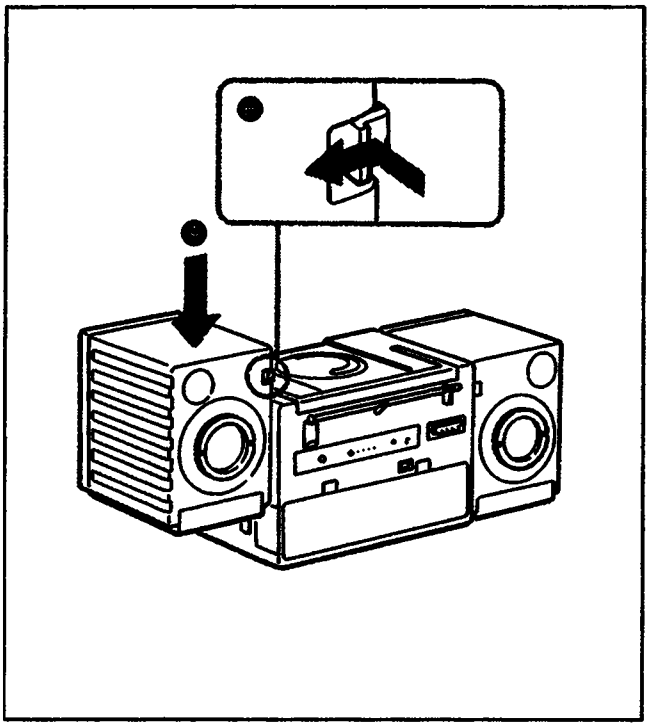
Batteries for the operation of the radio cassette-corder:
When the batteries become weak, the OPR/BATT indicator will become faint. In this case, replace all the batteries with new ones.

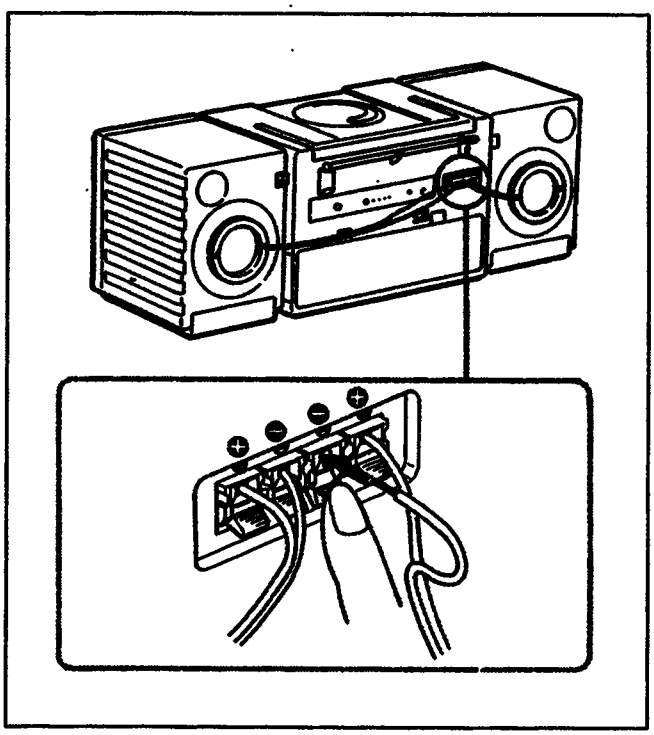
Batteries for clock/timer/memory:
When the batteries become weak, the indication in the display window becomes faint. Replace the batteries with new ones and then adjust the clock to the current time, reset the timer setting, if necessary.

Note

When you replace the batteries for clock/timer/memory, be sure to connect the AC power cord to the unit and to the wall outlet and turn the power on before you remove the batteries.

Connecting Speakers





To attach speakers ⊕
Align the grooves and slide the speaker box down.

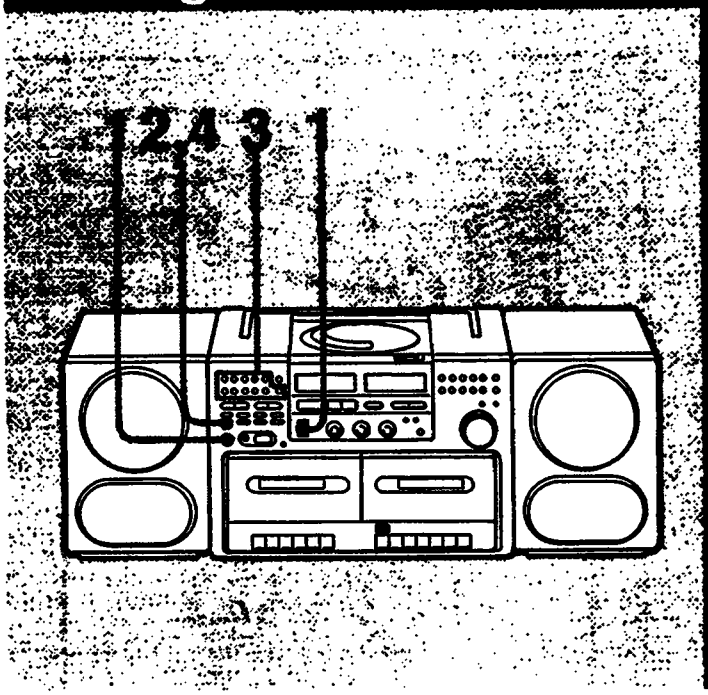
To detach speakers ⊖
Unlock the speaker and slide the speaker box all the way up and away from the main unit.

To connect the speaker wire

- Turn off the power before connecting or disconnecting the speaker cords.
- Connect the speaker cord of the right speaker to the R connectors and left speaker to the L connectors.
- Connect black wires to – terminals and red wires to + terminals.

Setting the Clock

Size AA (R6) batteries for clock/timer/memory should be inserted into the battery compartment.

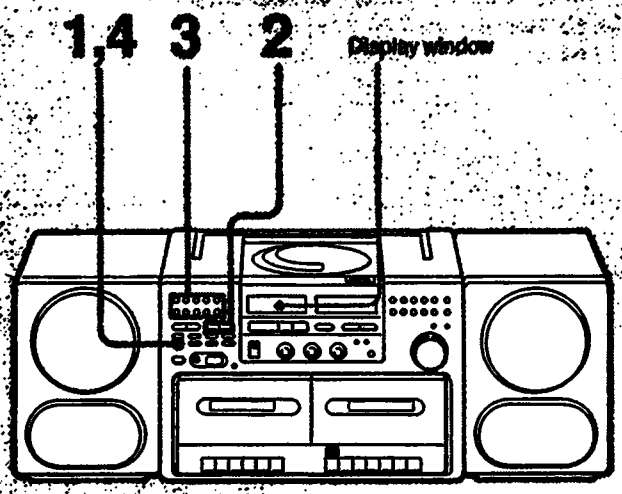


1 Turn the power off.

2 Press CLOCK for about 4 seconds until the CLOCK indication appears in the display window.

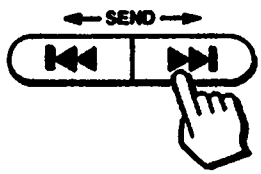
To Change One Digit

Example: To change AM 1:01 to AM 1:00

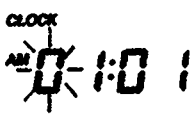


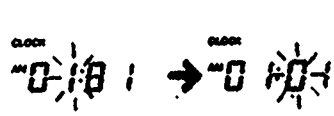
1 Press for about 4 seconds until the CLOCK indication appears in the display window.

2 Press ▶▶| three times until the last digit blinks.



Blinking shows the position where the next number will be entered. Blinking moves to the left by pressing |◀◀.





Time indication
AM 12:00 = midnight
PM 12:00 = noon

To set seconds exactly

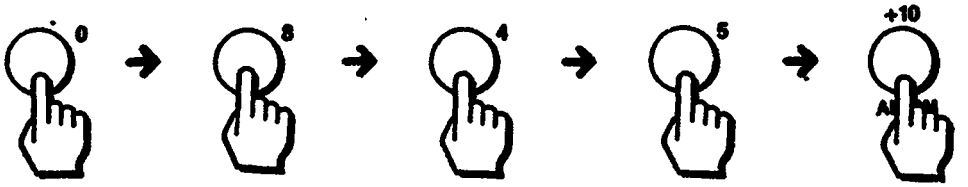
Ex.: To set the clock to PM7:00 (00 seconds)
Set the clock to PM6:59; then continue to keep CLOCK down. At a signal indicating the exact hour (ex. a radio broadcast or telephone "time" service), release the button.

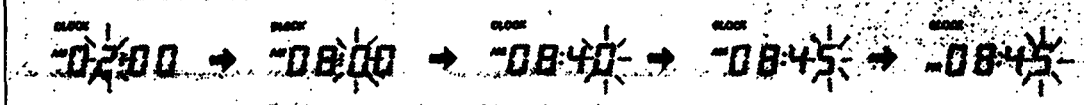
3 **Press the number buttons to enter the hour and then the minute.**

If the hour and/or minute has one digit, be sure to press 0 before the number.

Select AM or PM by +10/AM/PM.

Example: To set to PM 8:45.



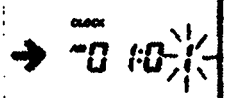
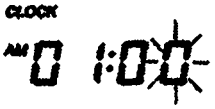
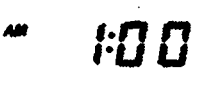


Blinking shows the position where the next number will be entered.

4 **Press CLOCK again.**

The moment you release the button, the clock starts.

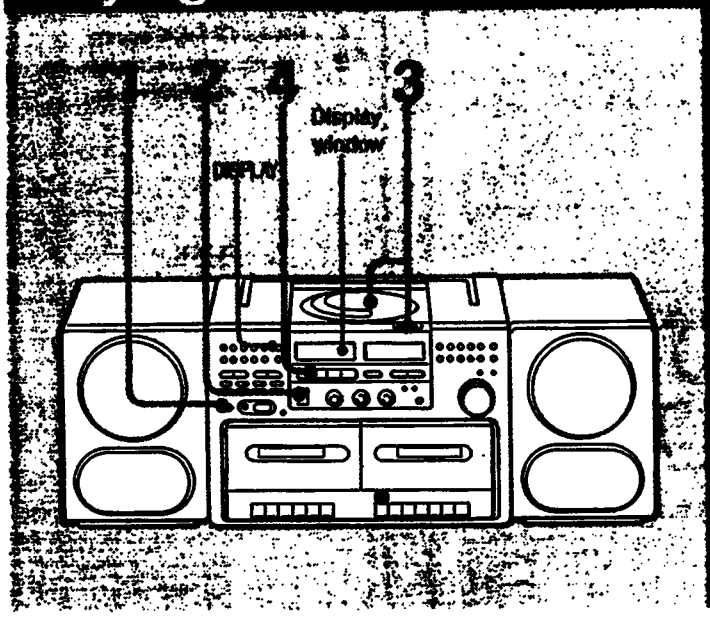
All the digits stay lit.

	3 **Press the number button.**	**4** **Press CLOCK again.** The moment you release the button the clock starts.
		All the digits stay lit.
		

To check the current time

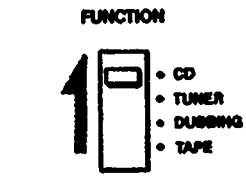
The display window shows the current time except when the CD playing. To check the time while playing the CD, press the CLOCK button.

Playing Discs You can play an 8 cm (3-inch) CD without using an adaptor for it.



1 **Press POWER (⏻ ON).**

2 **Set FUNCTION TO "CD".**



To adjust the volume and tone
Use the VOLUME and ROTARY EQUALIZER controls.
(See page 20.)

CD operating buttons

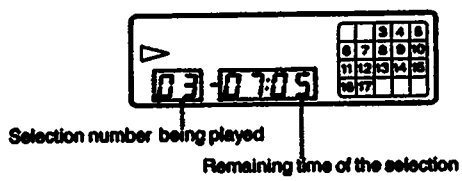
If you want to	Press
Play	▷
Stop play	□
pause for a moment	▯▯
resume play after pausing	▯▯
remove a disc	□→OPEN

After use
Turn the power off (⏻).

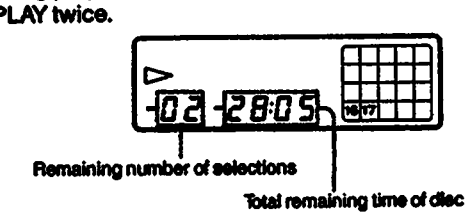
Important
Since the CD system offers a wide dynamic range, the peaks of high level inputs are recorded with high fidelity, and the noise level is very low. Do not turn up the volume while listening to a portion with no audio signals or very low level inputs. If you do, the speakers may be damaged when a peak level portion is played.

To Display Remaining Time

The selection being played
Press DISPLAY once.



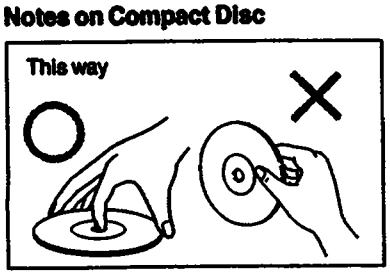
The disc being played
Press DISPLAY twice.



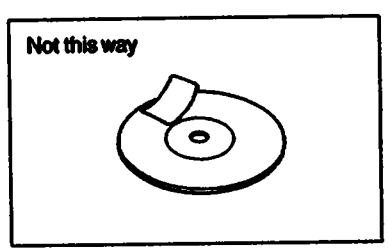
For normal display, press DISPLAY again.

Note
During shuffle or repeat playing, the remaining time of the disc being played cannot be displayed.

Notes on Compact Disc



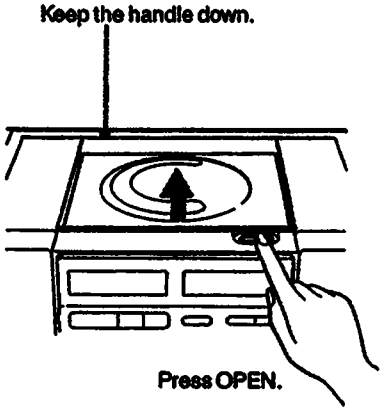
Handle the disc by its edge, and to keep the disc clean, do not touch the surface.



Do not stick paper or tape or write anything on the surface.

3 1

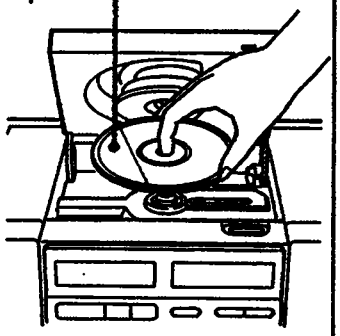
Keep the handle down.



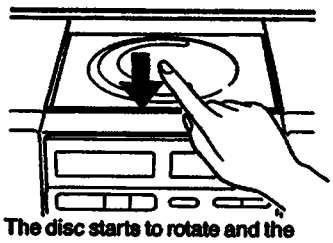
Press OPEN.

2

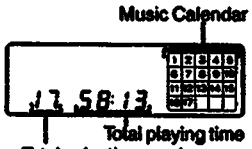
With the labeled surface facing up.



3 Insert the disc and close the holder.

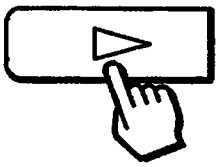


The disc starts to rotate and the indication appears as follows.

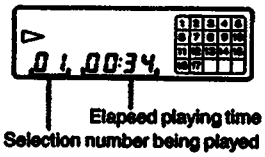


The indication will return to "00" after about 4 seconds.

4 Press ▷.



Playing of the first selection starts.

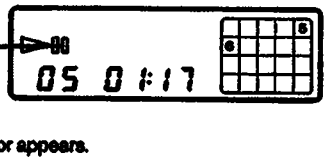


Note

Do not open the disc holder while playing the disc.

Information Display

While CD player is set in pause



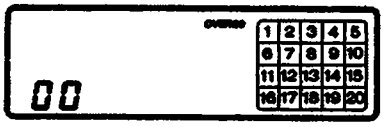
Between selections

The remaining time for the next selection is displayed.

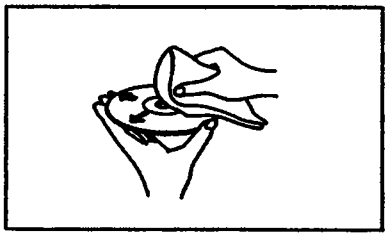
Notes

- If the disc is played near a TV or radio, noise may occur on the TV or radio.
- If there is no disc in the disc holder, the following indication appears in the display window.

- Up to 20 selections are displayed in the music calendar.
- If the disc has more than 21 selections, OVER 20 appears in the display window.



The remaining time of the selection from the 21st selection appears as "——:——". Elapsed playing time is displayed during playing. To see the "total selection number" and "total playing time" while the CD player is set in the stop mode, press DISPLAY.



Before playing, clean the disc with the optional CD cleaner. Wipe the disc from the center out.

Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

After playing, store the disc in its case.

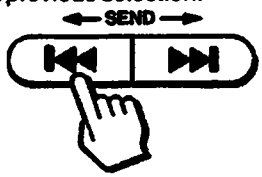
Do not expose the disc to direct sunlight or heat source such as hot air ducts, or leave it in a car parked in direct sunlight where there can be considerable rise in the temperature.

To Locate the Beginning of a Selection (AMS*)

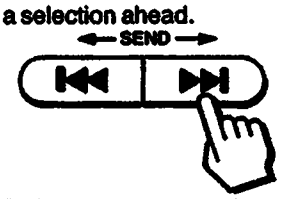
Be sure the SHUFFLE and PROGRAM EDIT indications are not displayed in the display window. Otherwise, press the SHUFFLE/PROGRAM button.

Press |◀◀ or ▶▶| during play or pause.

To locate a previous selection
Press |◀◀ once to locate the beginning of the selection being played.
Press continuously to locate a previous selection.



To locate a selection ahead
Press ▶▶| once to locate the next selection after that being played.
Press continuously to locate a selection ahead.



In pause mode
The player pauses at the beginning of each selection. To start playing, press ▯▯.

During program play
If you press |◀◀ or ▶▶| the player plays the selections in the memorized order.

During shuffle play
The disc does not locate a previous selection but the beginning of the selection being played when the |◀◀ button is pressed.

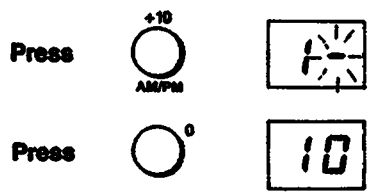
*AMS: Automatic Music Sensor

For Selecting Directly

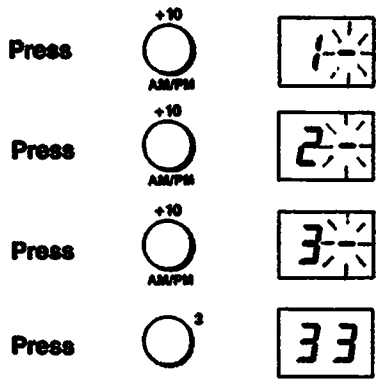
If a selection number is less than 10
Press a selection number by using the number buttons.

If a selection number is more than 10
Press +10 first then the number buttons.

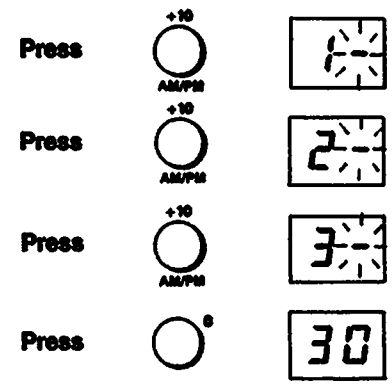
Example:
To select the 10th selection



To select the 33rd selection



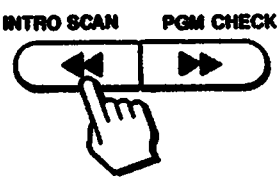
To select the 30th selection



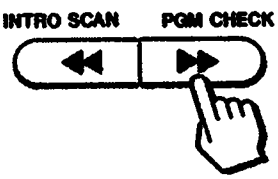
To search for a Particular Point in a Selection (Search)

Press ◀◀ or ▶▶ during play or pause.

To review disc playing



To advance disc playing



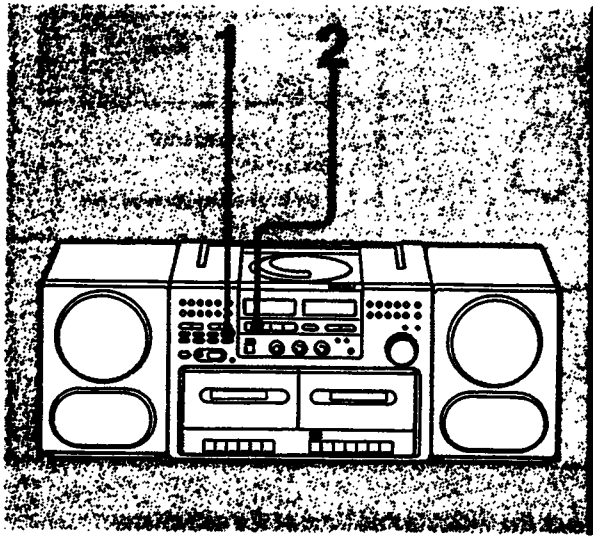
Release the button at the point desired, located by monitoring the high-speed sound.

In the pause mode, you can search rapidly. However, you cannot hear the sound. Observe the time counter.

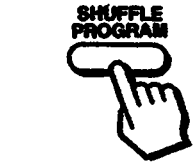
Various Disc Playing Modes

Each time you press the SHUFFLE/PROGRAM button, the playing mode changes in sequence as indicated in the display window: SHUFFLE → PROGRAM EDIT → normal play.

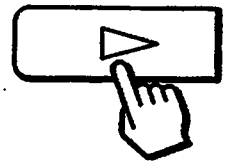
To Play Selections in Random Order—Shuffle Play



1 Press SHUFFLE/PROGRAM until SHUFFLE indication appears.



2 Press ▷.



The selection number will disappear from the music calendar when the selection is finished.

To stop shuffle play
Press □.

To release shuffle play
Press SHUFFLE/PROGRAM until the SHUFFLE or PROGRAM EDIT indication disappears from the display window.
Normal play begins from the selection being played.

To start shuffle play from normal play
Press SHUFFLE/PROGRAM during normal play.
Shuffle play begins from the selection being played.

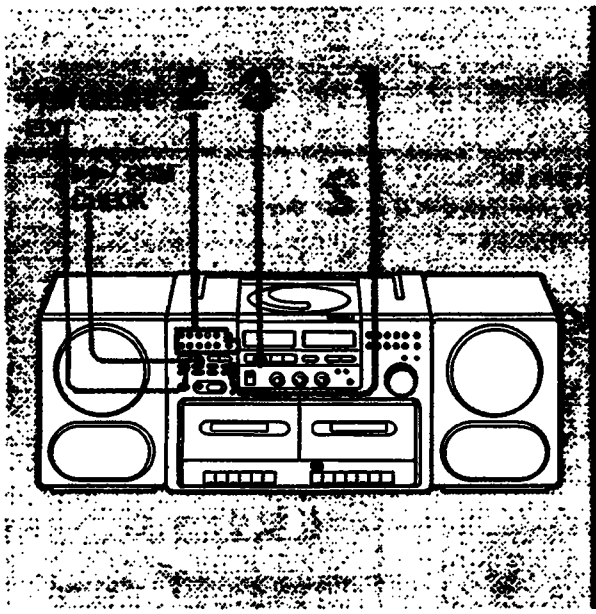
To display the remaining time of the selection being played
Press DISPLAY once.

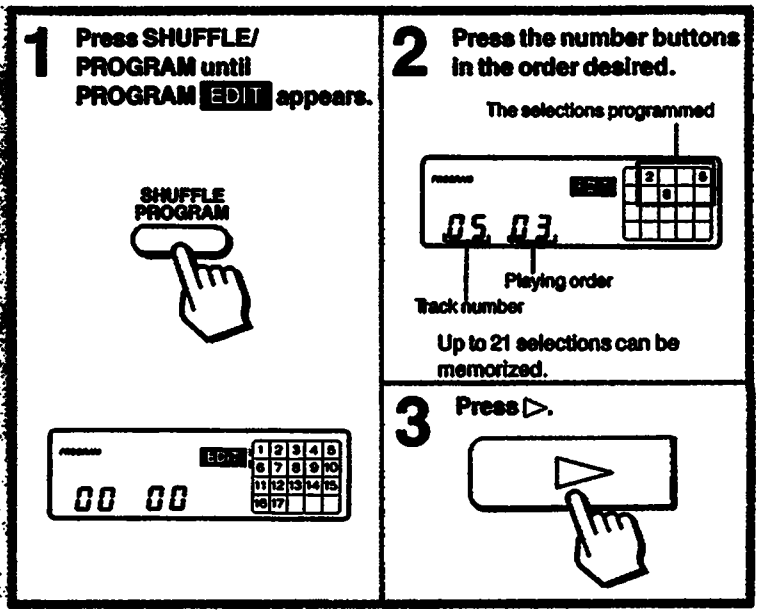
The remaining time of the selection being played.

To return to the normal display, press DISPLAY again.
From the 21st selection, the remaining time will be displayed as "——:——".

Note
During shuffle play, the remaining time of the disc is not displayed.

To Play the Selections in the Order Desired—Program Play




1 Press SHUFFLE/ PROGRAM until PROGRAM EDIT appears.
SHUFFLE PROGRAM
00 00
2 Press the number buttons in the order desired.
The selections programmed
05 03
Playing order
Track number
Up to 21 selections can be memorized.
3 Press ▷.

To stop program play
Press □.

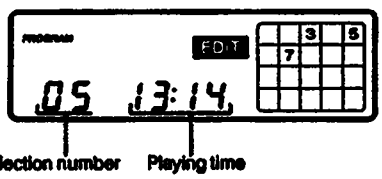
To reprogram the selections
- Open and close the disc holder to erase the previous program and repeat the steps from the beginning. Be sure the OPR/BATT indicator lights up; otherwise, the selections programmed cannot be erased.
- Press PGM CLEAR/EDIT to erase the last selection programmed.
  Each press of PGM CLEAR/EDIT erases one selection.
  Press the number button to program in a new order.

To program a pause
You can insert a pause once in any position. Press ▯▯ at the position desired. Pause counts as one selection.

During program play the player will be set in pause when it comes to *P*. To resume playing, press ▯▯ again.

To check the programmed selections
During programming, press ▶▶/PGM CHECK. You can check the selections from the beginning. Each press of ▶▶/PGM CHECK shows the programmed selections in order.

To check the total playing time of the selections programmed
During programming, press DISPLAY. The total playing time of the selections programmed appears in the display window.



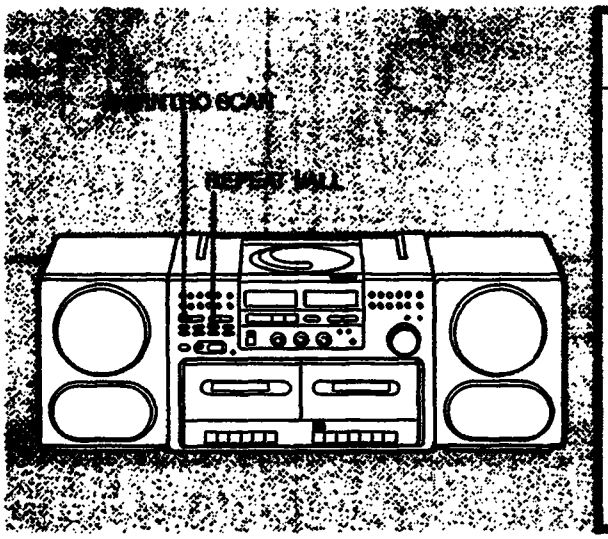
If there is a PAUSE in the programmed selections, the playing time after the PAUSE appears.
To return to the normal display, press DISPLAY again.

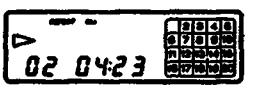
When the programmed selections are finished
The selection number in the music calendar disappears one by one, but the programmed selections are memorized until the lid of the disc holder is open.

To release program play
Press SHUFFLE/PROGRAM until the PROGRAM EDIT indication disappears from the display window.

To Select Repeat Mode

Press REPEAT 1/ALL.
Each time you press the REPEAT 1/ALL button, the repeat mode changes in sequence as indicated in the display window: REPEAT 1 → REPEAT ALL → normal play.



To repeat only one selection —Repeat 1 play	To repeat the entire disc —Repeat all play
While playing the selection you want to repeat.	While playing the disc you want to repeat.
Be sure REPEAT 1 indication appears in the display window.	Be sure REPEAT ALL indication appears in the display window. 

To stop repeat play
Press □.

To release the repeat play
Press REPEAT 1/ALL until the REPEAT indication disappears from the display window.

To repeat the program play
During program play, press REPEAT 1/ALL. The PROGRAM REPEAT indication appears in the display window, and the programmed selections will be repeated.

To repeat the shuffle play
During shuffle play, press REPEAT 1/ALL. The SHUFFLE REPEAT indication appears in the display window, and the shuffle play will be repeated.

Note
During repeat play, the remaining time of the disc being played cannot be displayed.

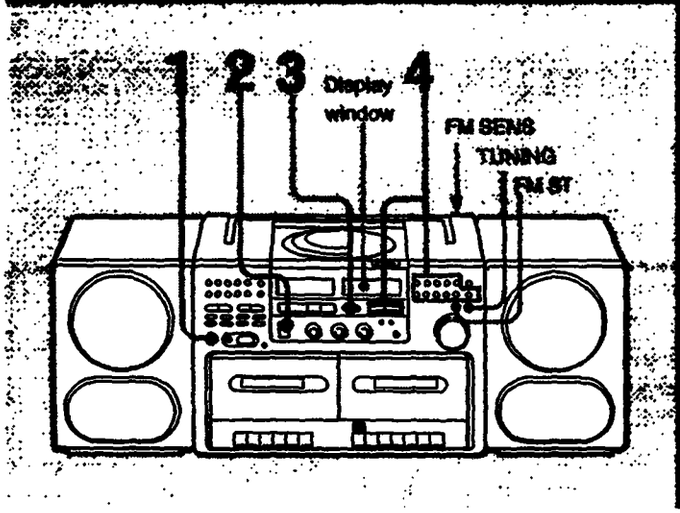
To Scan the Beginning of the Selections

You can scan the beginning of the selections in normal play, shuffle play and program play for 10 seconds by pressing ◀◀/INTRO SCAN while the disc player is in the stop mode.

To release INTRO SCAN, press any button for disc play.

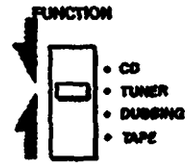
Notes
- If PAUSE is programmed in program play, the INTRO SCAN function skips the PAUSE.
- During REPEAT 1 play, the INTRO SCAN function does not work.

Listening to Radio Programs



1 Press POWER (⏏ ON).

2 Set FUNCTION to "TUNER".



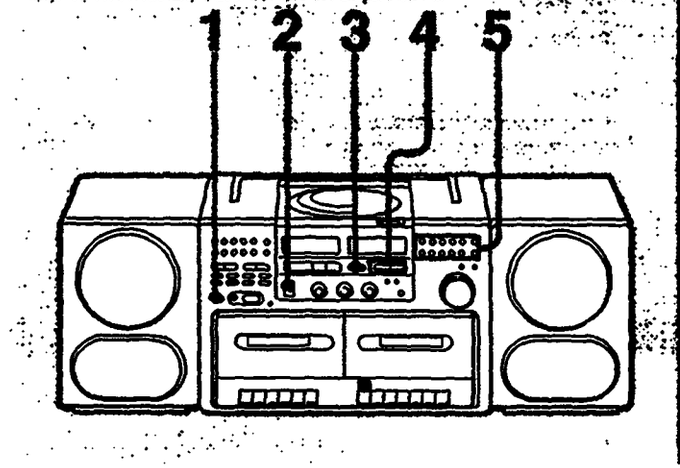
To adjust the volume and tone
Use the VOLUME and ROTARY EQUALIZER controls.
(See page 20.)

To turn off the radio
Press POWER (⏏ OFF).

Memory Preset Tuning

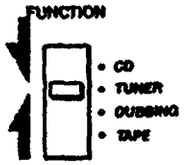
Once you preset the stations, you can listen to the station desired just by pressing the number buttons. You can preset up to 20 stations at random.

Ex: To memorize 89.2 MHz FM at preset 2



1 Press POWER (⏏ ON).

2 Set FUNCTION to "TUNER".



To tune in a preset station
After memorizing in the example above: press the preset tuning button 2. Memorized station FM 89.2 MHz will be tuned.

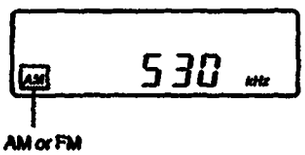
To erase the previous station
Enter a new station on the preset button, and the previous station will be erased automatically.

When an FM stereo program is tuned in
FM ST indicator lights up.

If the received FM stereo is too weak
The reception becomes monaural, and the FM ST indicator will go off.

FM SENS selector
While listening to FM programs, normally, set the selector to DX.
However, if a very strong station signal causes noise or if multipath signals are heard, set it to LOCAL. The noise will be reduced.

3 **Select the band desired, FM or AM.**

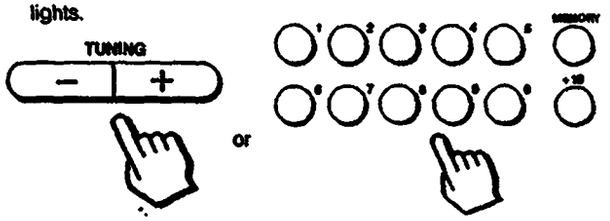


AM or FM

(If the station desired is preset, skip this step.)

4 **Tune in a station desired, or press the number button if the stations are preset.**

When the station desired is tuned in, the TUNING indicator lights.



The frequency increases (or deceases) by 10 kHz for AM and by 0.1 MHz for FM each time you press + (or −) of TUNING.

If a preset number is more than 10

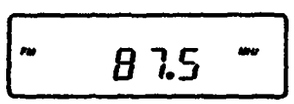
Ex. Preset number: 15

Press +10, then press 5 within 5 seconds.

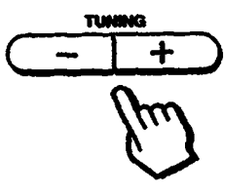
Note (for CFD-765 only)

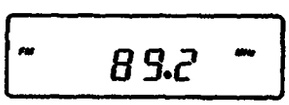
If you use the remote commander supplied near the unit while listening to an AM program. noise might be heard.

3 **Select the band desired, FM or AM.**

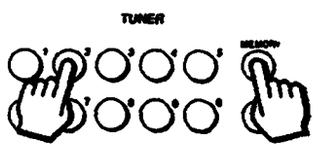


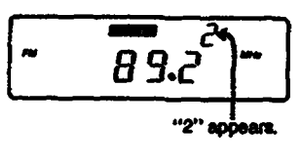
4 **Tune in a station desired.**





5 **While keeping MEMORY pressed, press a preset number desired.**





"2" appears.

If a preset number desired is more than 10

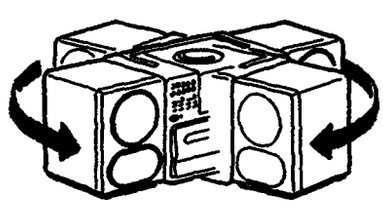
Ex. Preset number desired: 15

While keeping MEMORY pressed, press + 10, then press 5.

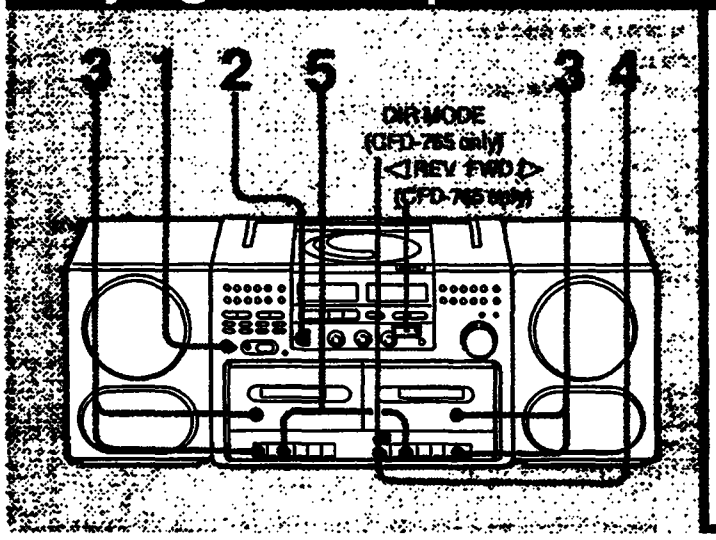
Antenna adjustment

FM

AM

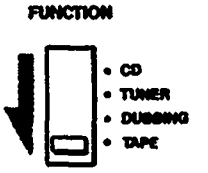


Playing Back Tapes (on either deck)



1 Press POWER (⏏ ON).

2 Set FUNCTION to "TAPE".



To adjust the volume and tone
Use the VOLUME and ROTARY EQUALIZER controls.

Tape operating buttons

If you want to	Press
play	▶
stop play	■⏏
pause for a moment	⏸
resume play after pause	⏸
remove a cassette	■⏏ (twice)

(For CFD-755 and CFD-765 deck A)
After winding with ◀◀ or ▶▶ press ■⏏ to release ◀◀ or ▶▶.

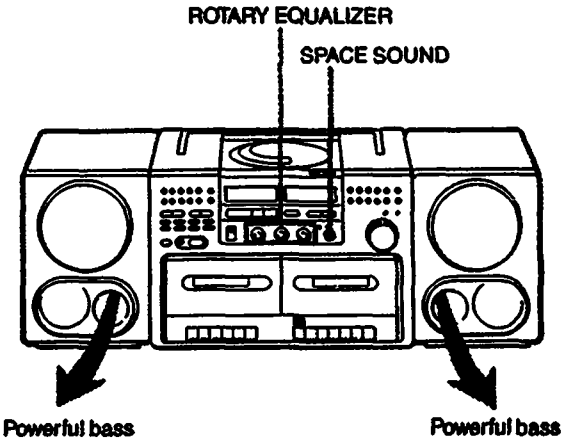
After use
Turn the power off (⏻).

For private listening, connect stereo headphones to PHONES jack.

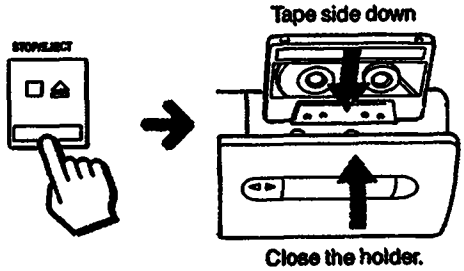
Adjusting Sound

To Obtain Powerful Bass

The "MEGA BASS" system produces a powerful bass with the use of a bass reflex system added to a normal speaker system.



3 **Insert a cassette into deck A or B.**



Use the TYPE I (normal) tape.

4 **(For CFD-765, deck B only)**

Check the tape transport direction (▷front side/◁reverse side) with the tape transport direction indicators.
If required, switch the tape transport direction by pressing ◀▮▶.

5 **Press PLAY.**

On the deck with the tape inside

Tape Transport Direction (For CFD-765 deck B only)
Check the tape transport direction (▷front side ◁reverse side) with the tape transport direction indicators. If required, change the tape transport direction by pressing ◀▮▶.

To Select the Playback Mode (For CFD-765, deck B only)
Set the DIR MODE selector to the position desired.

To playback both sides of a cassette once starting from the front side to the reverse side of a cassette	Set to ⇄
To playback one side of a casette	Set to ⇉

To listen to the both sides of a cassette (for CFD-765, deck B only)
Both-side-playback should be started from the front side. Be sure to set the tape transport direction indicators to▷. If not, playback will stop when the playback of the reverse side is finished even though the DIR MODE selector is set to ⇄.

To Locate the Desired Point of a Selection (CUE and REVIEW function) (For CFD-765, deck B only)
During playback, keep pressing ◀◀ or ▶▶ and release the button at the desired point found by monitoring the high-speed sound.

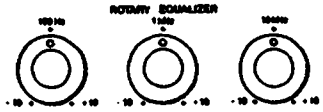
Tape transport direction indicators	▷FWD	◁REV
To locate the selection being played (REVIEW)	◀◀	▶▶
To locate the selection ahead (CUE)	▶▶	◀◀

To resume playback
Release ◀◀ or ▶▶.

When both decks A and B are in moving mode
- When both decks are in playback mode, only playback from deck B will be audible.
- The tape transport direction indicators show the tape transport direction of deck B. (for CFD-765 only)

To Equalize the Sound Reproduced

Turn each ROTARY EQUALIZER control toward +10 or −10. When the equalizer is not used, set the controls to 0 (center position).

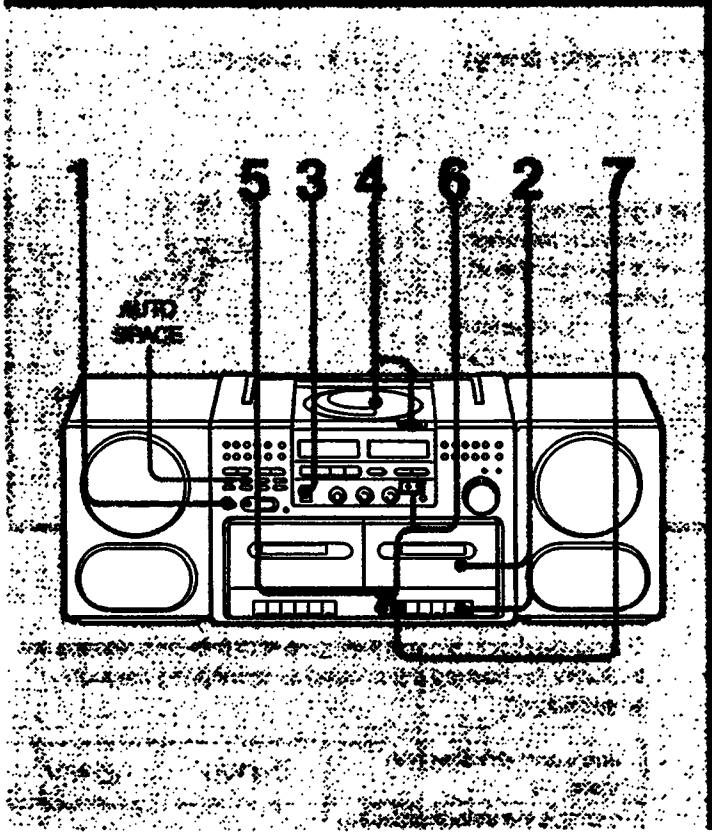


100 Hz: Boost or cut heavy bass.
1 kHz: Provide more presence for vocals.
10 kHz: Adjust the brightness of the sound or reduce tape hiss.

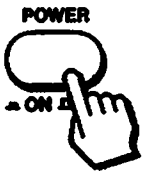
To Enjoy Surround Effect

Press SPACE SOUND for a rich and spacious effect added to the original sound.
The SPACE SOUND button is useful when the stereo image is diminished because your speakers are too close together or your listening room is small.
The effect differs depending on the selection. In monaural this effect does not operate.

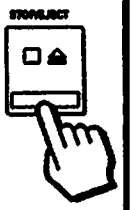
Recording CD Sound (Deck B)



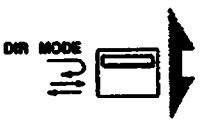
1 **Press POWER (⏏ ON).**



2 **Insert a blank cassette into deck B.**



5 **(For CFD-765 only).**
Set the DIR MODE selector



	DIR MODE selector
To record on both sides of a cassette*	⇄
To record on one side of a cassette	⇄

*Both-sides-recording should be started from the front side.

To stop recording
Press □ of CD player and ■⏏ of deck B.

After recording
Turn the power off (⏻).

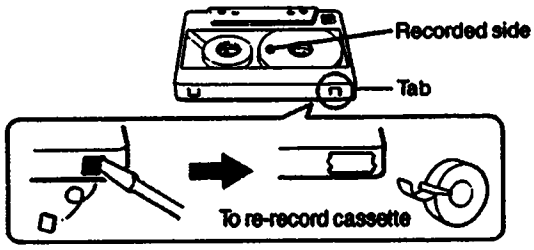
The recording level is adjusted automatically.
The settings of VOLUME and ROTARY EQUALIZER will not affect the recording level.

Notes
- While recording the tape direction can not be changed with ◀▮▶ button.
- Even though the DIR MODE selector is set to ⇄, if recording starts from the reverse side, recording ends on that side and REC is released automatically.
- You cannot turn off the power even if you press POWER during recording.

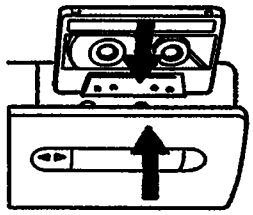
Automatic Editing on the CD for Recording (CD Synchronized Reverse Recording) (for CFD-765 only)

Set the DIR MODE selector to ⇄.
If the front side of the tape ends in the middle of a selection, the tape will reverse automatically and re-record the selection from its beginning. If you erase the selection whose recording was not completed, you can get the tape edited nicely.

To prevent accidental erasure
Break off the tab corresponding to side which has been recorded. Recording will be protected.

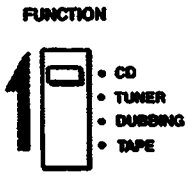


Use TYPE I (normal) tape.



Close the holder.

3 Set FUNCTION to "CD".



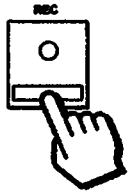
4

Insert a disc.
(See page 13.)

6 (For CFD-765 only)
Check the tape transport direction indicators.

If required, switch the tape transport direction by pressing ◀‖▶.

7 Press REC.



▶ is pressed automatically. After approx. 8 seconds, CD starts automatically and the recording starts. (CD synchronized starting system)

To Record in Shuffle/Program Mode

1 Press POWER and set FUNCTION to "CD".
2 Select shuffle or program play.
3 Press the REC button.

Playback of the disc and recording starts automatically after a few seconds.

To record the Blank Spaces on the tape while recording CD programs

Press AUTO SPACE.
A Four-second blank space is automatically recorded on the tape.

Press AUTO SPACE again for normal recording.

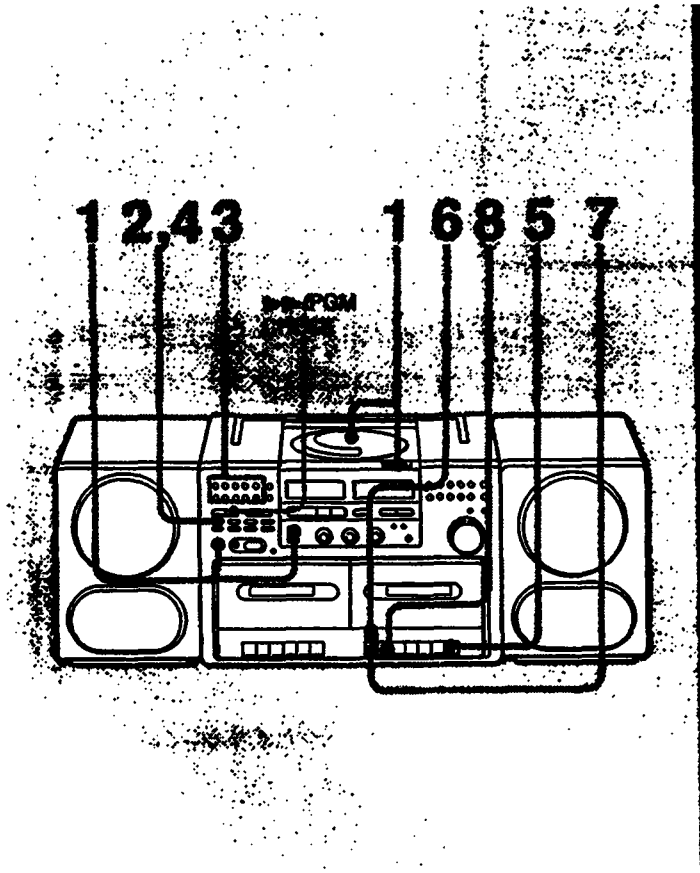
Automatic Editing on the CD for Recording by Specifying

This CD radio cassette-recorder automatically edits the selections on a disc according to the tape length (recording length).
The recording length can be specified up to 99 minutes.

To edit automatically, use the PGM CLEAR/EDIT button. Each time PGM CLEAR/EDIT you press, the editing mode change in sequence as indicated in the display window:
EDIT 1 → EDIT 2 → normal recording.

EDIT 1: This unit programs the selections beginning from the first one on the disc, summing up the playing time. When the accumulated playing time exceeds half of the specified tape length (= tape length of the front side), the last selection is arranged to be recorded on the reverse side of the tape.

EDIT 2: This unit programs the selections beginning from the first one on the disc, summing up the playing time. When the accumulated playing time exceeds half of the specified tape length (= tape length of the front side), the last selection will be eliminated. Then, the unit looks for a selection whose length is within the remaining tape length of the front side, and substitutes it for the one eliminated.



1

Insert a disc.
(Steps 1 through 3 in "Playing Discs")

Be sure the SHUFFLE or the PROGRAM indication disappears in the display window; otherwise, press SHUFFLE/PROGRAM.

2 Select EDIT 1 or EDIT 2.

EDIT 1

Press once.

EDIT 2

Press twice

5

Insert a blank cassette in deck B.
Use TYPE I (normal) tapes.

6 (For CFD-765 only)
Set DIR MODE to ⇄.

To check the programmed selections
Press ▶▶/PGM CHECK. You can check the selections from the beginning one by one.

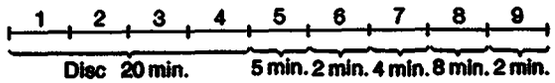
When recording on the front side is finished (For CFD-755 only)
The CD player is set to the pause mode and the cassette deck is set to the stop mode. Operate as follows:

① Take out the cassette and reverse the recording side.
② Reinsert the cassette and press REC of the cassette deck and ▮▮ of the CD player.

The CD player starts to play and the cassette deck starts to record on the reverse side.

the Tape Length

Example: To record on a 46-minute-tape (23 minutes for each side)



EDIT 1: Front side: 1 2 3 4 — total 20 minutes

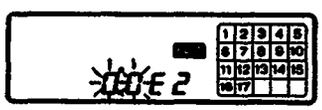
Reverse side: 5 6 7 8 9 — total 21 minutes

EDIT 2: Front side: 1 2 3 4 6 — total 22 minutes

Reverse side: 5 7 8 9 — total 19 minutes

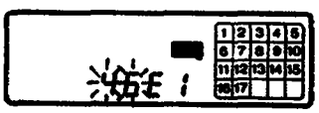
Notes

- Use a tape which is longer than the total playing time.
- Up to 20 selections can be edited automatically.
- When PGM CLEAR/EDIT is pressed, the selection order memorized for program play will be erased.
- To record the selections which cannot be recorded on the specified tape, after the selection programmed for automatic editing, press SHUFFLE/PROGRAM and record them in the program play.
- When the disc holder is open, the selection order programmed for automatic editing will be erased.

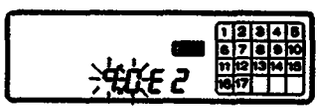


3 **Enter the total length by pressing the number buttons.**

Ex. 46-minute tape
Press "4", then "6".

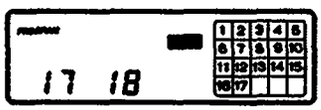


Ex. 90-minute tape
Press "9", then "0".



4 **Press PGM CLEAR/EDIT.**

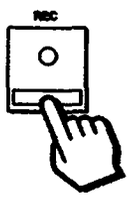
When the total playing time is shorter than the tape length, the CD player will be set in the program mode.



When the total playing time is longer than the tape, change the tape for a longer one and repeat from step 3.

(For CFD-765 only)
Check the tape transport direction indicators.
Recording should be started from the front side (▷).
If required, switch the tape transport direction by pressing ◀▶.

8 **Press REC.**
▶ is pressed automatically.



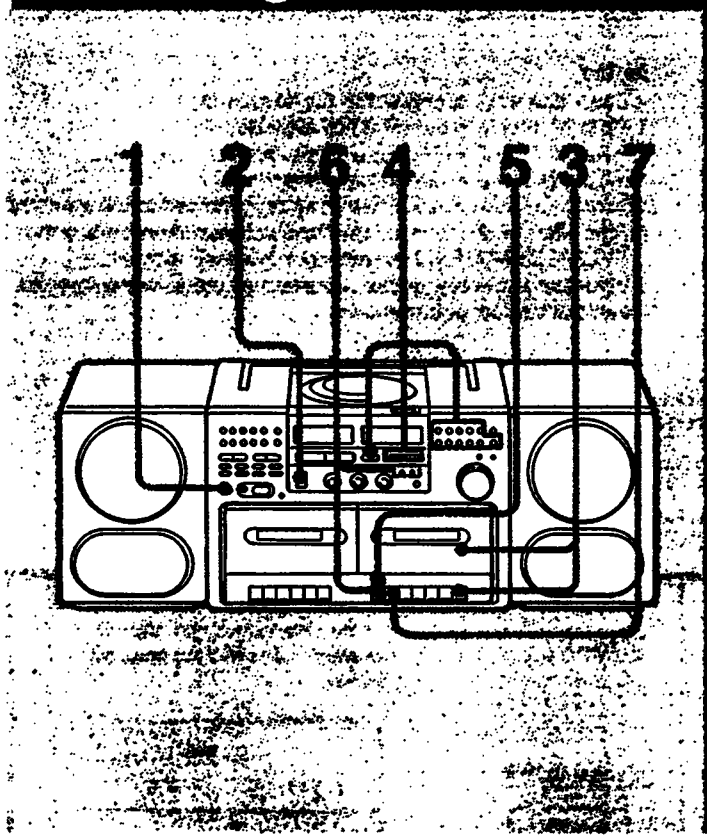
After approx. 8 second, CD starts automatically and the recording starts. (CD synchronized starting system.)

When recording on the front side is finished (For CFD-765 only)
The CD player is set to the pause mode, the cassette deck starts to erase the remaining tape on the front side, and then, the tape transport direction changes to reverse.
The CD player automatically starts to play and the cassette deck starts to record on the reverse side.

To stop recording
Press □ of the CD player and ■⏏ of the cassette deck.

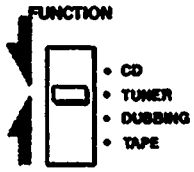
After recording
Turn the power off (⏻).

Recording Radio Sound (Deck B)



1 **Press POWER (⏏ ON).**

2 **Set FUNCTION to "TUNER".**



5 **(For CFD-765 only) Set the DIR MODE selector.**

	DIR MODE selector
To record on both sides of a cassette*	⇄
To record on one side of a cassette	⇄

* Both-sides-recording should be started from the front side.

To stop recording
Press ■⏏.

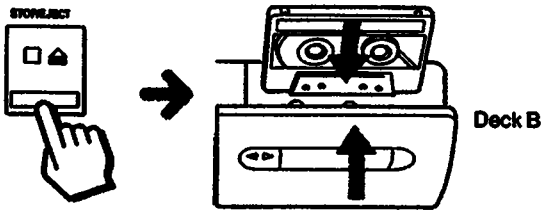
After recording
Turn the power off (⏻).

The settings of VOLUME and ROTARY EQUALIZER will not affect the recording level.

Note
- You cannot turn off the power even if you press POWER during recording.

To reduce noise during AM recording
If a whistling noise is heard, which was inaudible before the REC button is pressed, set the ISS switch on the rear panel to 1, 2 or 3, depending on which one best reduces the noise.

3 **Insert a blank cassette into deck B.**
Use TYPE I (normal) tape.



4

Select the band desired, FM or AM and tune in the station desired. (See page 19.)

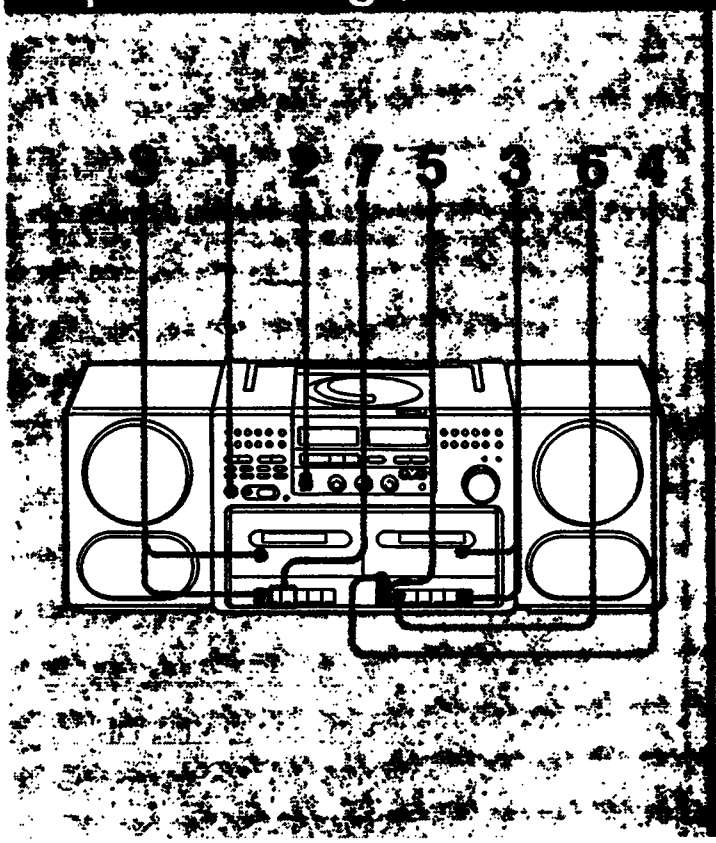
6 **(For CFD-765 only)**
Check the tape transport direction indicators.

If required, switch the tape transport direction by pressing ◀‖▶.

7 **Press REC.**

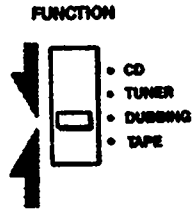
▶ is pressed automatically.

Tape Dubbing (from deck A to deck B)

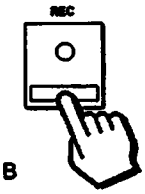


1 **Press POWER (⏏ ON).**

2 **Set FUNCTION to "DUBBING".**



6 **Press REC.**



▶ is pressed automatically.
The unit will stand by.

7 **For normal dubbing**

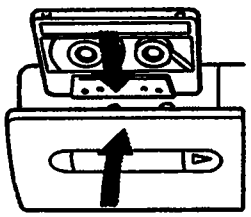
To stop dubbing
Press ■⏏ of deck A and then deck B.

After dubbing
Turn the power off (⏻).

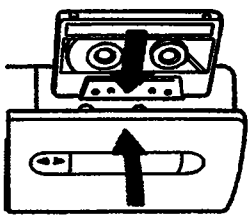
No volume adjustment is necessary during dubbing
Recording level is automatically set. So turn down the volume if you do not want to hear the high speed sound during high speed dubbing.

3 **Insert a recorded cassette into deck A.**
Insert a blank cassette into deck B.

Deck A Cassette to be played back.



Deck B Cassette to be recorded.



Use TYPE I (normal) tape.

4 **(For CFD-765 only)**
Select the tape transport direction mode.

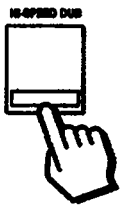
5

(For CFD-765 only)
Check the tape transport direction indicators.

If required, switch the tape transport direction by pressing ◀▶

For high-speed dubbing

Deck A

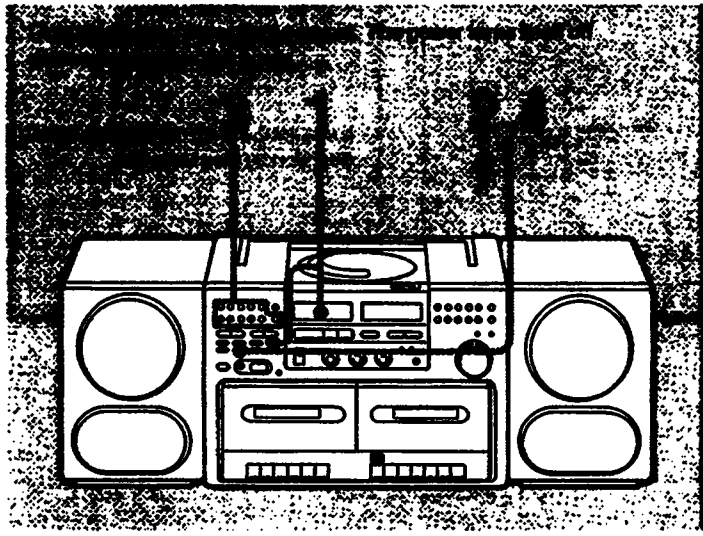


Recording standby is automatically released and dubbing starts. (synchronized starting system)

Notes

- If deck A's tape finishes first, ▶ will automatically be released and deck B will also stop. ● and ▶ are still depressed. To release them, press ■⏏.
- If deck B's tape finishes first, ● and ▶ will automatically be released. Deck A will continue to play.
- When both decks A and B are in movement, the tape transport direction indicators show the tape transport direction of deck B. (for CFD-765 only)
- You cannot turn off the power even if you press POWER during dubbing.

Using the Built-in Timer

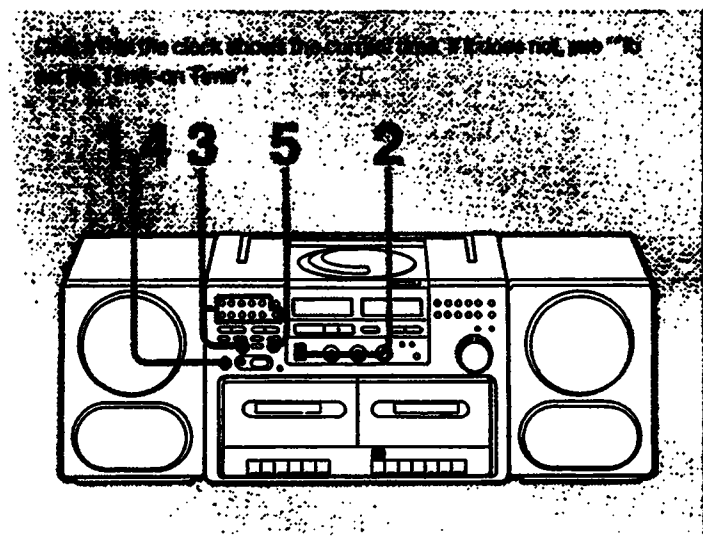


1 **Make sure the STANDBY indication does not appear in the display window.**
(If it appears, press the STANDBY switch.)

2 **Press TIMER.**

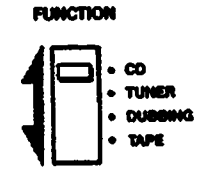
If the timer is preset by mistake
Repeat the above steps. The previous preset goes off.

To check the preset time
Press TIMER in the standby mode.



1 **Press POWER (⏏ ON).**

2 **Select the sound source desired.**



At the preset time
The sound will come on automatically at the preset time, and will turn off automatically after two hours have elapsed.

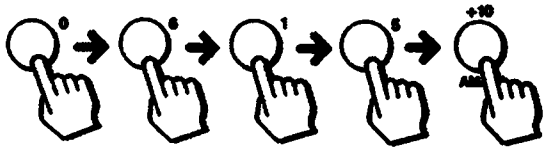
To release the timer standby mode
Press STANDBY. The STANDBY indication disappears from the display window.

To listen to the discs in various playing modes at the time desired
1 Press POWER (⏏ ON).
2 Set FUNCTION to "CD".
3 Be sure that the disc player is in the stop mode and select the playing mode desired from REPEAT 1/ALL, SHUFFLE and PROGRAM. (See page 15–17.)
4 Set the timer.
5 Turn the power off (⏻ OFF (TIMER/SLEEP)).
6 Press STANDBY so that the STANDBY indication will appear in the display window.

The playing will start automatically at the preset time.

The TIMER indication appears.

3 **Press the number buttons to program the starting time.**
Ex. Set to 6:15 a.m.



4 **Press TIMER.**

The current time appears in the display window.

Note
Be sure to program AM and PM correctly.

AM 12:00=midnight
PM 12:00=noon

	FUNCTION selector	Preparation
To listen to a disc	CD	Insert a disc into the disc holder
To listen to a radio	TUNER	Select the band and tune in the station desired.
To listen to a tape*	TAPE	Insert a cassette into deck B.

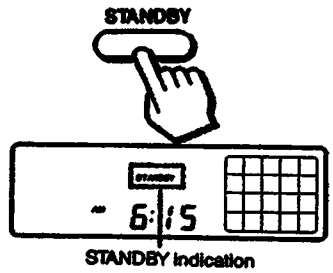
* for CFD-765 only

3

Set the timer.
(See above.)

4 **Turn the power off(⏻ OFF (TIMER/SLEEP)).**

5 **Press STANDBY.**



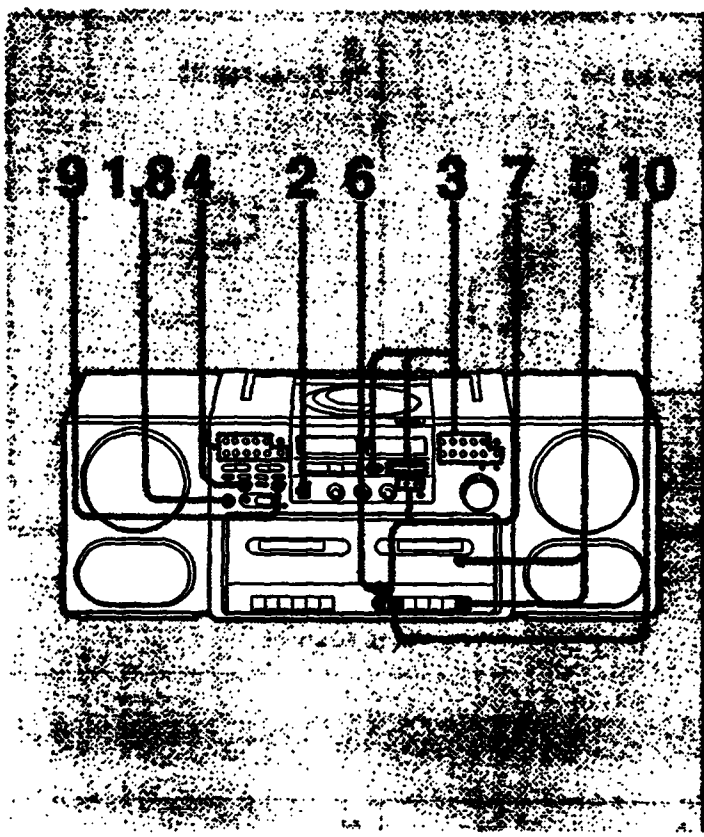
STANDBY indication

To listen to a tape, press ▶ on the deck.

Make sure that the STANDBY indication appears in the display window.

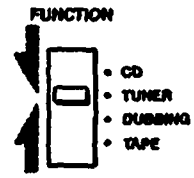
If you want to listen to the sound at the same time in the next day
The preset time is memorized once you set it so that you do not need to set it again. Press STANDBY again if STANDBY indication does not appear in the display window.

Timer Recording (for CFD-155, 255 & 355 only)

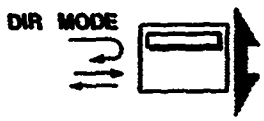


1 Press POWER (⏏ ON).

2 Set FUNCTION to "TUNER".



6 Set the DIR MODE selector.



	DIR MODE selector
To record on both sides of a cassette*	⇄
To record on one side of a cassette	⇉

* Both-sides-recording should be started from the front side.

At the preset time
The recording will start automatically at the preset time and will turn off automatically after two hours. However the radio will continue until it is turned off. If a cassette of less than 120 minutes is used, the recording will finish when the tape reaches the end.

To release the timer stand by mode
Press STANDBY.

3

Select the band desired and tune in the station.
(See page 19.)

4

Set the timer for recording.
(See page 30.)

5

Insert a cassette into deck B.
Use TYPE I (normal) tape for recording.

7

Check the tape transport direction indicators.

If required, switch the tape transport direction by pressing ◀▶.

8 **Turn the power off (⏻ OFF (TIMER/ SLEEP)).**

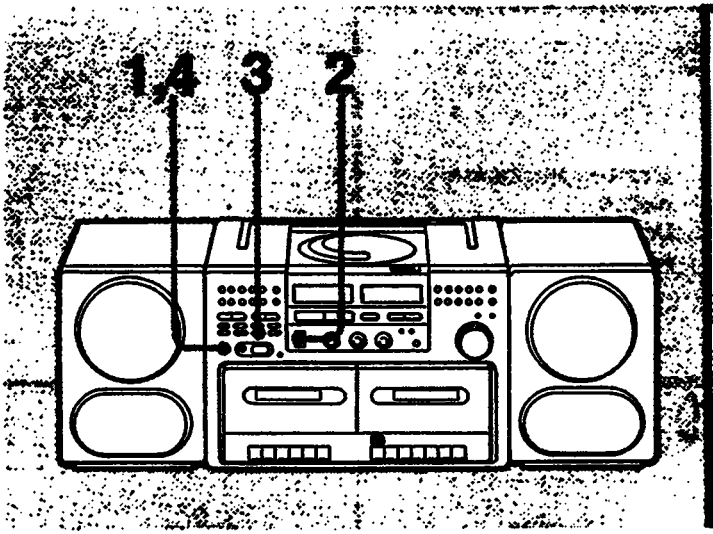
9 **Press STANDBY.**

Be sure that STANDBY indication will appear on the display window.

10 **Press REC.**

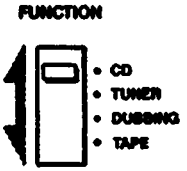
▶ is pressed automatically.

To Fall Asleep with the Sound Desired—Sleep Function



1 Press POWER (⏏ ON).

2 Select the sound source desired and play it.

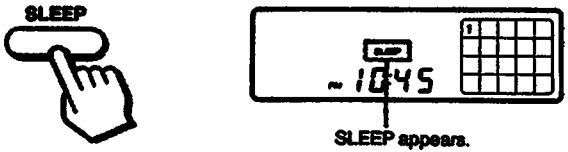


To release the sleep function before 60 minutes have elapsed
Press SLEEP again to erase the SLEEP indication.

You can fall asleep with the sound desired and you will be awaked by the same program at the preset time.
1 Follow the steps as described in "To Fall Asleep with the Sound Desired".
2 Follow the steps as described in "To Listen to the Sound at the Time Desired" (See page 30).

The SLEEP and STANDBY indications are displayed in the display window.

3 Press SLEEP to start the sleep function.

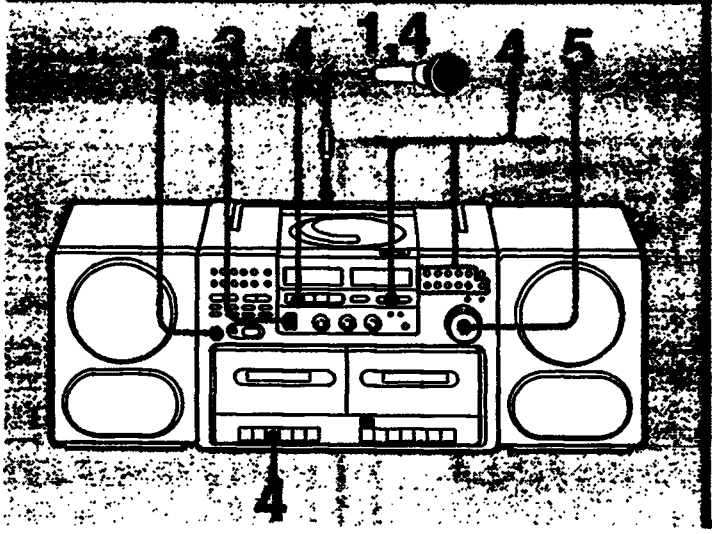


The sound source will turn itself off after 60 minutes.

4 Turn the power off (⏻ OFF (TIMER/ SLEEP)).

Microphone Mixing

Microphone sounds can be mixed with CD, radio or the tape.



1

Connect a microphone (not supplied) to MIX MIC.
If the microphone has a power switch, set it to on.

Use a monaural microphone.

2 **Press POWER (⏏ ON).**

To record mixed sounds

Insert a cassette into deck B and press the REC button.

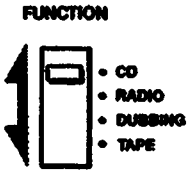
Public address system

1 Connect a microphone to MIX MIC.
If the microphone has a power switch, set it to on.
2 Press POWER (⏏ ON).
3 Set FUNCTION to "TAPE".
4 Adjust VOLUME.

Notes

- If a howling (acoustic feedback) occurs, move the microphone away from the speakers.
- It is not recommended to use a microphone equipped with echo function.

3 Select the sound source desired.



Sound source	FUNCTION selector
CD sound	CD
Radio programs	TUNER
Tape sound *	DUBBING

* Insert a cassette to be played back into deck A.

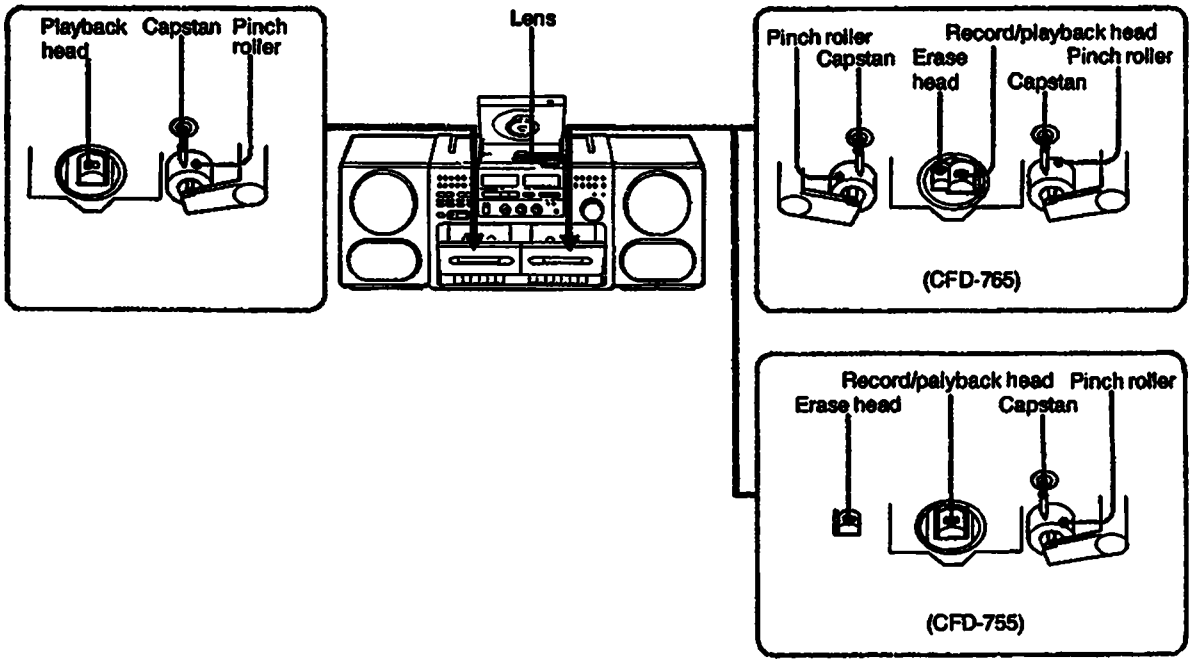
4

Play the sound source and speak or sing into the microphone.

5

Adjust VOLUME.

Maintenance



Cleaning the heads and tape path
Contaminated heads cause insufficient recording or sound drop-out in playback.
We recommend cleaning after every 10 hours of operation. To make the best possible recordings, however, you should clean all surfaces over which tape travels before making each recording.

Wipe the heads, the pinch rollers and the capstans with a cleaning tip slightly moistened with cleaning fluid or alcohol.

After cleaning the heads, rollers and tape path, insert a cassette when the areas cleaned are completely dry.

Demagnetizing heads
After 20 to 30 hours of use, enough residual magnetism will have built up on the heads to begin to cause loss of high frequencies and hiss. At this time you should demagnetize the heads and all metal parts in the tape path with a commercially available head demagnetizer.

Cleaning the lens
If you have accidentally touched the lens of the CD player section with dirty fingers or the dust has accumulated on the lens, the unit will not operate properly. In such cases, clean the lens with lens cleaning kit (not supplied).

Cleaning the cabinet
Celan the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 6-ohm loads, both channels driven from 500-10,000Hz: rated 2W per channel-minimum RMS power, with no more than 10% total harmonic distortion in AC operation.

OTHER SPECIFICATIONS

CD player section

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wavelength 780nm Emission duration: Continuous Laser output: Less than 44.6μW * *This output is the value measured at a distance of about 200mm from the objective lens surface on the optical pick-up block.
Spindle speed	200 r.p.m. to 500 r.p.m. (CLV)
Error correction	Sony Super Strategy Cross Interleave Read Solomon Code
Number of channels	2
Frequency response	20—20,000Hz $^{+0}_{-2}$ dB
Wow and flutter	Below measurable limit

Radio section

Frequency range	FM: 87.5—108MHz AM: 530—1,710kHz
Antennas	FM: Telescopic antenna AM: Built-in ferrite bar antenna

Tape recorder section and general

Recording system	4-track 2-channel stereo
Fast winding time	Approx. 2 min. with Sony cassette C60
Frequency response	• Total with TYPE 1 (NORMAL) cassette: 80—10,000Hz • Playback with TYPE 1 (NORMAL) cassette: 60—12,000Hz
Speaker	Two-way speakers: Full-range: 10cm dia., cone type Woofer: 8cm dia.
Power output	Model for Canada Two-way speakers: 6W + 6W (at 3.2 ohms, 315Hz, 10% harmonic distortion)
Inputs	Mixing microphone input jack (minijack) Sensitivity 2.5mV For low impedance microphone
Outputs	Headphones jack (stereo minijack) For 16—68 ohms impedance headphones
Power requirements	120V AC, 60HZ DC 15V, 10 size D (R20) batteries for CD radio cassette-corder DC 4.5V, 3 size AA (R6) batteries for clock/timer/memory
Power consumption	25W

Battery life — Batteries for CD radio cassette-corder

	Recording	Playback	CD playing
Sony SUM-1 (NS)	approx. 9H	approx. 4H	approx. 1.5H
Sony Alkaline AM1 (N)	approx. 16H	approx. 8H	approx. 4H

Dimensions	696 × 255 × 236mm (w/h/d) (27 1/2 × 10 1/8 × 9 3/8 inches) not incl. projecting parts and controls
Weight	Approx. 9.4kg, incl. batteries (Approx. 20 lb 12 oz)
Supplied accessory	AC power cord (1) Remote commander (1) (for CFD-765 only)

Design and specifications subject to change without notice.

OPTIONAL ACCESSORIES

Stereo headphones Sony "MDR" Headphone Series
Dynamic microphone Sony "DYNAMIC MICROPHONE" series
Cassette erase BE-A200
Head demagnetizer HE-5C
Head cleaning stick CLH-5
Cleaning kits KK-4
CD cleaner XP-CD1, XP-CD4

Troubleshooting Guide

General

Trouble	Cause and remedy
The unit does not operate.	• The AC power cord is not connected (for AC operation). • Incorrect polarity of batteries (See page 8.) • Weak batteries (See page 8.)
No audio	• Turn the VOLUME control toward MAX. • Check the FUNCTION selector setting. • The headphones are plugged into PHONES jack (when listening through the speakers). • Speakers are not connected. (See page 9.)
The sound is cracked or distorted.	• Turn down the VOLUME control.

CD Player Operation

Trouble	Cause and remedy
The unit does not operate.	• The disc inserted with the labeled surface facing down. • Dusty or defective disc (See page 13.) • Dirty or dusty lens (See page 38.) • The disc holder lid is not closed. • Moisture condensation • When the CD operation buttons cannot be activated, turn off the unit and begin again. • Improper setting of the FUNCTION selector.
Skipping of sound	• Dusty or defective disc (See page 13.) • Dirty lens (See page 38.) • Strong vibrations

Cassette-Corder Operation

Trouble	Cause and remedy
Tape does not move.	• The cassette is being inserted improperly. • The tape is slack. • The cassette holder lid is not closed.
The REC button cannot be activated.	• No cassette in the cassette holder. • The tab is removed from the cassette. (See page 22.)
Recording or playback cannot be made or there is a decrease in sound level.	• Dirty heads (See page 38.) • Improper setting of the FUNCTION selector.
Unsatisfactory erasing	• Dirty erase head (See page 38.) • Weak batteries (See page 8.)
Excessive wow or flutter, or sound drop-out	• Contamination of the capstan or pinch roller (See page 38.) • Magnetic contamination of the head (See page 38.) • Weak batteries (See page 8.)

Clock Operation

Trouble	Cause and remedy
Clock does not operate correctly.	• Incorrect polarity of batteries for clock/tuner/memory. (See page 8.) • Weak batteries. (See page 8.)
Timer does not operate correctly.	• Check if the clock is correctly set. (See page 10.) • Check if timer setting is correct. (See page 30.) • Weak batteries. (See page 8.)

Remote Control Operation (for CFD-765 only)

Trouble	Cause and remedy
The unit cannot be remotely controlled	• Weak batteries of the remote commander. • Check if the remote commander points the remote sensor.